

## AMENDMENT

### In the Claims

Claim 1 - 44 (cancelled)

Claim 45 (new): A method to prepare an epothilone D derivative with a methyl group at C-12 and a double bond between C-12 and C-13, which method comprises providing substrates including extender units to a non-*S. cellulosum* host cell that expresses a modified functional epothilone PKS comprising (a) the proteins encoded by the *Sorangium cellulosum* *epoA*, *epoB*, *epoC*, *epoE*, and *epoF* genes and (b) a modified functional *epoD* protein that lacks a  $\beta$ -carbonyl modifying activity encoded by a *Sorangium cellulosum* *epoD* gene, wherein said activity is selected from the group consisting of a ketoreductase (KR) activity encoded by module 4, a dehydratase (DH), enoylreductase (ER) or KR activity encoded by module 5, or an ER or KR activity encoded by module 6.

Claim 46 (new): The method of claim 45 wherein the modified functional *epoD* protein has an inactivating deletion in a  $\beta$ -carbonyl modification domain.

Claim 47 (new): The method of claim 46, wherein the entire  $\beta$ -carbonyl modification domain is deleted.

Claim 48 (new): The method of claim 47, wherein the  $\beta$ -carbonyl modification domain is the KR domain in module 6.

Claim 49 (new): The method of claim 47 wherein the DH and KR domains of module 6 of the unmodified *Sorangium cellulosum* *epoD* protein have been replaced with a KR domain from a polyketide synthase other than an epothilone PKS.

Claim 50 (new): The method of claim 46 wherein the deletion is in the ER domain of module 6.

Claim 51 (new): The method of claim 46 wherein the deletion is in the KR domain of module 6.

Claim 52 (new): The method of claim 46 wherein the deletion is in the KR domain of module 5.

Claim 53 (new): The method of claim 46 wherein the deletion is in the ER domain of module 5.

Claim 54 (new): The method of claim 46 wherein the deletion is in the DH domain of module 5.

Claim 55 (new): The method of claim 46 wherein the deletion is in the KR domain of module 4.

Claim 56 (new): The method of claim 45 wherein the non-*S. cellulosum* host cell further comprises a *Sorangium cellulosum epoK* gene product.

Claim 57 (new): The method of claim 45 further comprising the step of recovering an epothilone D from culture medium in which the non-*S. cellulosum* host cell is cultured.